Application No.: 10/644,436 Docket No.: 65851-0013

REMARKS

Applicant has carefully reviewed the Office Action mailed April 28, 2005. Claims 1 – 8 have been previously canceled. Claims 9 – 16 have been rejected under 35 U.S.C. 102(b) as being anticipated by Frederick (U.S. Patent No. 4,614,161).

Claims 9 – 15 have been amended. Claims 10 – 14 have been amended to clarify and address minor typographical issues. Claim 17 has been added. Accordingly, claims 9 – 17 are pending in this application. Applicants respectfully request reconsideration of the present application in view of the following remarks. No new matter has been added.

I. Rejection of claims 9 – 16 under 35 U.S.C. § 102 (b) – Frederick

Claims 9 – 16 have been rejected under 35 U.S.C. 102 (b) as being anticipated by Frederick (U.S. Patent No. 4,614,161). The rejection is respectfully traversed.

Applicant's independent claim 9 as amended includes a method of lacing a generally toroidal coil comprising the steps of: supporting said coil on an angularly rotating support; providing a needle having an open eye, said needle having an axis and being rotatable about its axis and being radially and axially movable relative to said toroidal coil to enter and leave a region defined inside a perimeter of said coil; providing a feeder source for providing a lacing cord; *wrapping the lacing cord all around the needle's eye while the needle is moving radially relative to the toroidal coil, before the needle leaves the region defined inside the perimeter of said coil.*

The Examiner asserts that "Fredrick discloses, among other things, a method of lacing a generally toroidal coil provided with slots in an electric machine, by means of an apparatus comprising: a support for the coil, capable of angularly rotating the coil; a needle 42 having an open eye 44, the needle 42 having an axis and being rotatable relative to the toroidal coil to enter and leave a region defined inside a perimeter of the coil; a feeder (28,30) for lacing cord 32, the method of being characterized in that it causes wrapping of the lacing cord around the needle while the latter is radially moving, before the needle leaves the region defined inside the perimeter of the coil (see Figures 5 – 8)." *See Office Action page 2, lines 12 – 19.*

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To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."[1] "The identical invention must be shown in as complete detail as is contained in the ... claim."[2]

Frederick discloses a device and a method adapted for automatically securing the lacing cord used to bind the end windings of the stator of an electrodynamic machine by tying a knot in said cord, in order to secure it, at the completion of the lacing cycle (see *column 1, lines 42-46*); in contrast, the Applicant teaches securely fastening the lacing cord to the needle's eye (see *page 1, paragraph [0011] of the publication no. US 2004/0040143*), the lacing cord being securely fastened all around the needle's eye before this latter leaves the region defined inside the perimeter of the coil and while the needle is radially moving.

Furthermore, the claimed invention includes **a needle that is rotatable about its own axis and radially and axially movable**. The above feature is the one allowing the lacing cord being securely fastened all around the needle's eye before this latter leaves the region defined inside the perimeter of the coil and while the needle is radially moving. In contrast, Figs. 5 – 8 of Fredrick clearly show that the lacing cord is not securely fastened by being wrapped around the needle, particularly around the needle's eye, as claimed.

Figures 5 – 8 do not show the wrapping of the lacing cord around the needle's eye while the latter is radially moving, before the needle leaves the region defined inside the perimeter of said coil; on the contrary, Figures 5 – 7 show the stator end windings and the lacing needle in successive progressing positions during the lacing cycle, wherein the lacing needle is inserted adjacent one end of the winding to intercept the lacing cord, withdrawn, moved axially to another end of the windings, and again inserted to intercept the lacing cord, and Figure 8 shows a portion of the stator end windings wherein a number of lacing wraps are formed.

Moreover, Fredrick, col. 4, line 64 – col, 5, line 12, does not disclose or suggest that the lacing cord 32 is secured to the lacing needle 42 by wrapping the lacing cord 32 all around the lacing needle 42; on the contrary the term "engage" denotes the way the lacing needle 42 holds

[1] *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).
[2] *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

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the lacing cord 32. Furthermore, Frederick discloses that the movement of lacing needle 42 and tubular finger 30 is coordinated to properly cause engagement between the lacing needle and lacing cord while the Applicant teaches that both the lacing needle and the cord feeder rotate, the first one about its own axis and the second one about the needle, in order to make the lacing cord be secured by wrapping all around the needle's eye (*see page 2, [0030 to 0033] in connection with Figures 2A to 2E*).

In view of the amendment to independent claim 9 and the advantages the claimed invention provides over the teaching of Frederick, it is respectfully submitted that claim 9 is now in condition for allowance. Claims 10 – 14, and new claim 17, which depend from claim 9 are also allowable over the applied art for the same reasons. Withdrawal of this rejection is respectfully requested.

Applicant's amended independent claim 15 includes an apparatus for lacing a generally toroidal coil, comprising: a support for said coil, wherein said support is capable of angularly rotating the coil; a needle having an open eye, said needle having an axis and being rotatable about its axis and being radially and axially movable relative to said toroidal coil to enter and leave the region defined inside a perimeter of said coil; a feeder source for providing a source of lacing cord; and an eccentric control assembly for displacing said feeder about the axis of said needle at a speed twice a rotation speed of the needle, *whereby said lacing cord is wrapped all around the needle's eye of said needle.*

In view of the amendment to independent claim 15 and the same advantages as stated above over the teaching of Frederick, it is respectfully submitted that claim 15 is now in condition for allowance. Claim 16, which depend from claim 15 is also allowable over the applied art for the same reasons. Withdrawal of this rejection is respectfully requested.

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II. Conclusion

In view of the above, each of the presently pending claims in this application is believed to be in condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Any fee due has been address in an accompanying transmittal. Please charge our Deposit Account No. 18-0013, under Order No. 65851-0013 from which the undersigned is authorized to draw.

Dated: August 29, 2005

Respectfully submitted,

By _____

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